Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A refrigeration door adapted for use in a refrigerating compartment, said door comprising:

an inner sheet of glass including a first surface and a second surface, said first surface of said inner sheet being disposed adjacent the interior of the refrigerating compartment;

an outer sheet of glass including a first surface and a second surface, said first surface of said outer sheet being disposed adjacent the exterior environment of the refrigerating compartment;

a middle sheet of glass disposed between said inner and outer sheets of glass;

a first sealant assembly disposed around the periphery of said inner sheet of glass and said middle sheet of glass for maintaining said inner sheet and said middle sheet in spaced-apart relationship from each other;

a second sealant assembly disposed around the periphery of said middle sheet of glass and said outer sheet of glass for maintaining said middle sheet and said outer sheet in spaced-apart relationship from each other;

a first low emissivity coating adjacent the second surface of said inner sheet of glass;

a second low emissivity coating adjacent the second surface of said outer sheet of glass;

said inner sheet, outer sheet, middle sheet, first sealant assembly, second sealant assembly, and said first and second low emissivity coatings forming an insulating glass unit having a U

value substantially equal to or less than 0.2 BTU/hr-sq ft-F substantially preventing the formation of condensation on said first surface of said outer sheet of glass without the application of electricity for heating said first surface of said outer sheet of glass; and

a frame secured around the periphery of said insulating glass unit; wherein at least one of the first and second sealant assemblies is a non-metal sealant assembly.

2. (Previously Presented) The refrigeration door of claim 1, further comprising:

a first chamber defined by said inner sheet of glass, said middle sheet of glass, and said first sealant assembly;

a second chamber defined by said middle sheet of glass, said outer sheet of glass, and said second sealant assembly; and

a gas disposed in each of said first and second chambers.

3. (Original) The refrigeration door of claim 2, wherein:

said inner, said middle, and said outer sheets of glass have a thickness substantially equal to one eighth of an inch;

said inner and said middle sheets of glass being spaced apart a distance substantially equal to one half inch; and

said middle and said outer sheets of glass being spaced apart a distance substantially equal to one half inch.

4. Canceled.

5. (Original) The refrigeration door of claim 2, wherein said first sealant assembly and said second sealant assembly each have a heat transfer rate substantially equal to or less than 1.73 Btu/hr-ft-F.

6. (Original) The refrigeration door of claim 5, wherein:

said inner, said middle and said outer sheets of glass having a thickness substantially equal to one eighth of an inch;

said inner and said middle sheets of glass being spaced apart a distance substantially equal to one half inch; and

said middle and said outer sheets of glass being spaced apart a distance substantially equal to one half inch.

7. (Original) The refrigeration door of claim 2, wherein said gas in said first chamber and said second chamber are the same.

8. (Original) The refrigeration door of claim 2, wherein said gas in said first chamber and said second chamber are not the same.

9. (Original) The refrigeration door of claim 2, wherein said gas is selected from the group consisting of argon, krypton, and air.

10. (Original) The refrigeration door of claim 1, wherein said insulating glass unit has a U value substantially equal to or less than 0.16 BTU/hr-sq ft-F.

11. (Original) The refrigeration door of claim 1, wherein said outer sheet and said inner sheet each have an emissivity substantially equal to or less than 0.05.

12. (Original) The refrigeration door of claim 1, wherein said outer sheet and said inner sheet each have an emissivity substantially equal to or less than 0.03.

13. (Original) The refrigeration door of claim 1, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.04.

14. (Original) The refrigeration door of claim 1, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.01.

15. (Original) The refrigeration door of claim 1, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.0025.

16. (Original) The refrigeration door of claim 2, wherein said first and second low emissivity coatings are selected from the group consisting of a titania based silver and fluorine doped tin oxide.

17. (Original) The refrigeration door of claim 2, wherein said first and second low emissivity coatings are applied with a process selected from the group consisting of sputter coating, pyrolytic coating and spray coating.

18. (Original) The refrigeration door of claim 2, wherein said frame is formed from a material selected from the group consisting of extruded plastic, aluminum, and fiber glass.

19. (Original) The refrigeration door of claim 1, wherein the interior temperature of the refrigerating compartment is substantially equal to or less than minus twenty degrees Fahrenheit; the temperature of the exterior environment is substantially equal to or greater than seventy degrees Fahrenheit; and the humidity in the exterior environment is substantially equal to or greater than sixty percent; and wherein said first surface of said outer sheet of glass is substantially free of condensation.

20. (Original) The refrigeration door of claim 1, wherein the interior temperature of the refrigerating compartment is substantially equal to or less than minus forty degrees Fahrenheit; the temperature of the exterior environment is substantially equal to or greater than eighty degrees Fahrenheit; and the humidity in the exterior environment is substantially equal to or greater than sixty percent; and wherein said first surface of said outer sheet of glass is substantially free of condensation.

21. (Original) The refrigeration door of claim 1, wherein the interior temperature of the refrigerating compartment is substantially equal to or less than zero degrees Fahrenheit; the temperature of the exterior environment is substantially equal to or greater than seventy two degrees Fahrenheit; and the humidity in the ambient environment is substantially equal to or

greater than sixty percent; and wherein said first surface of said outer sheet of glass is substantially free of condensation.

22. Canceled.

23. (Original) The refrigeration door of claim 1, wherein said first sealant assembly and said second sealant assembly each have a heat transfer rate substantially equal to or less than 1.73 Btu/hr-ft-F.

24. (Original) The refrigeration door of claim 1, wherein said first sealant assembly and said second sealant assembly each have a heat transfer rate substantially equal to or less than 1.51 Btu/hr-ft-F.

25. (Original) The refrigeration door of claim 1, wherein said first sealant assembly and said second sealant assembly each have a heat transfer rate substantially equal to or less than 0.84 Btu/hr-ft-F.

26. (Currently Amended) A refrigeration door adapted to be mounted on a refrigerating compartment, said door comprising:

an inner sheet of glass including a first surface and a second surface, said first surface of said inner sheet being disposed adjacent the interior of the refrigerating compartment;

an outer sheet of glass including a first surface and a second surface, said first surface of said outer sheet being disposed adjacent the exterior environment of the refrigerating compartment;

a middle sheet of glass disposed between said inner and outer sheets of glass;

a first sealant assembly disposed around the periphery of said inner sheet of glass and said middle sheet of glass for maintaining said inner sheet and said middle sheet in spaced-apart relationship from each other;

a second sealant assembly disposed around the periphery of said middle sheet of glass and said outer sheet of glass for maintaining said middle sheet and said outer sheet in spaced-apart relationship from each other;

a first low emissivity coating adjacent the second surface of said inner sheet of glass;

a second low emissivity coating adjacent the second surface of said outer sheet of glass;

said inner sheet, outer sheet, middle sheet, first sealant assembly, second sealant assembly, and said first and second low emissivity coatings forming an insulating glass unit having an emissivity substantially equal to or less than 0.04 substantially preventing the formation of condensation on said first surface of said outer sheet of glass without the application of electricity for heating said first surface of said outer sheet of glass; and

a frame secured around the periphery of said insulating glass unit; wherein at least one of the first and second sealant assemblies is a non-metal sealant assembly.

27. (Previously Presented) The refrigeration door of claim 26, further comprising:

a first chamber defined by said inner sheet of glass, said middle sheet of glass, and said first sealant assembly;

a second chamber defined by said middle sheet of glass, said outer sheet of glass, and said second sealant assembly; and

a gas disposed in each of said first and second chambers.

28. (Original) The refrigeration door of claim 27, wherein:

said inner, said middle, and said outer sheets of glass have a thickness substantially equal to one eighth of an inch;

said inner and said middle sheets of glass being spaced apart a distance substantially equal to one half inch; and

said middle and said outer sheets of glass being spaced apart a distance substantially equal to one half inch.

29. Canceled.

30. (Original) The refrigeration door of claim 27, wherein said gas is selected from the group consisting of argon, krypton, and air.

31. (Original) The refrigeration door of claim 26, wherein said insulating glass unit has a U value substantially equal to or less than 0.16 BTU/hr-sq ft-F.

32. (Original) The refrigeration door of claim 26, wherein said outer sheet and said inner sheet each have an emissivity substantially equal to or less than 0.05.

33. (Original) The refrigeration door of claim 26, wherein said outer sheet and said inner sheet each have an emissivity substantially equal to or less than 0.03.

34. (Original) The refrigeration door of claim 26, wherein said insulating glass unit has a U value substantially equal to or less than 0.2 BTU/hr-sq ft-F.

35. (Original) The refrigeration door of claim 26, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.01.

36. (Original) The refrigeration door of claim 26, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.0025.

37. (Original) The refrigeration door of claim 27, wherein said low emissivity coatings are selected from the group consisting of a titania based silver and fluorine doped tin oxide.

38. (Original) The refrigeration door of claim 27, wherein said low emissivity coatings are applied with a process selected from the group consisting of sputter coating, pyrolytic coating and spray coating.

39. (Original) The refrigeration door of claim 27, wherein said frame is formed from a material selected from the group consisting of extruded plastic, aluminum, and fiber glass.

40. (Original) The refrigeration door of claim 26, wherein the interior temperature of the refrigerating compartment is substantially equal to or less than minus twenty degrees Fahrenheit; the temperature of the exterior environment is substantially equal to or greater than seventy degrees Fahrenheit; and the humidity in the exterior environment is substantially equal to or greater than sixty percent; and wherein said first surface of said outer sheet of glass is substantially free of condensation.

41. (Original) The refrigeration door of claim 26, wherein the interior temperature of the refrigerating compartment is substantially equal to or less than minus forty degrees Fahrenheit; the temperature of the exterior environment is substantially equal to or greater than eighty degrees Fahrenheit; and the humidity in the exterior environment is substantially equal to or greater than sixty percent; and wherein said first surface of said outer sheet of glass is substantially free of condensation.

42. (Previously Presented) The refrigeration door of claim 26, wherein the interior temperature of the refrigerating compartment is substantially equal to or less than zero degrees Fahrenheit; the temperature of the exterior environment is substantially equal to or greater than seventy-two degrees Fahrenheit; and the humidity in the ambient environment is substantially equal to or greater than sixty percent; and wherein said first surface of said outer sheet of glass is substantially free of condensation.

43. Canceled.

44. (Original) The refrigeration door of claim 26, wherein said first sealant assembly and said second sealant assembly each have a heat transfer rate substantially equal to or less than 1.73 Btu/hr-ft-F.

45. (Previously Presented) The refrigeration door of claim 26, said wherein first sealant assembly and said second sealant assembly each have a heat transfer rate substantially equal to or less than 1.51 Btu/hr-ft-F.

46. (Previously Presented) The refrigeration door of claim 26, wherein said first sealant assembly and said second sealant assembly each have a heat transfer rate substantially equal to or less than 0.84 Btu/hr-ft-F.

47. (Currently Amended) A refrigeration door having an outer surface and adapted for use in a refrigerating compartment, said door comprising:

a first sheet of glass;

a second sheet of glass;

a first sealant assembly disposed around the periphery of said first sheet of glass and said second sheet of glass for maintaining said first sheet and said second sheet in spaced-apart relationship from each other;

a first low emissivity coating adjacent a surface of said first sheet or said second sheet of glass;

said first sheet and second sheets of glass, said first sealant assembly, and said first low emissivity coating forming an insulating glass unit having a U value substantially equal to or less than 0.2 BTU/hr-sq ft-F; and

a frame secured around the periphery of said insulating glass unit; wherein the first sealant assembly is a non-metal sealant assembly.

48. (Original) The refrigerator door of claim 47, further comprising:

a third sheet of glass;

a second sealant assembly disposed around the periphery of said second sheet of glass and said third sheet of glass for maintaining said second sheet and said third sheet in spaced-apart relationship from each other; and

wherein said insulating glass unit further includes said third sheet of glass and said second sealant assembly.

49. (Original) The refrigeration door of claim 48, further including a second low emissivity coating adjacent a surface of said first sheet, said second sheet, or said third sheet of glass.

50. (Original) The refrigeration door of claim 49, wherein the U value of said insulating glass unit is effective to substantially prevent the formation of condensation on the outer surface of the door without the application of electricity for heating the outer surface when the interior temperature of the refrigerating compartment is substantially equal to or less than zero degrees Fahrenheit; the temperature of the exterior environment is substantially equal to or greater than

seventy-two degrees Fahrenheit; and the humidity in the ambient environment is substantially equal to or greater than sixty percent.

51. (Previously Presented) The refrigeration door of claim 47, wherein the U value of said insulating glass unit is effective to substantially prevent the formation of condensation on the outer surface of the door without the application of electricity for heating the outer surface when the interior temperature of the refrigerating compartment is substantially equal to or less than zero degrees Fahrenheit; the temperature of the exterior environment is substantially equal to or greater than seventy-two degrees Fahrenheit; and the humidity in the ambient environment is substantially equal to or greater than sixty percent.

52. (Original) The refrigeration door of claim 51, further comprising:

a first chamber defined by said first sheet of glass, said second sheet of glass, and said first sealant assembly; and

a gas disposed in said first chamber.

53. (Original) The refrigeration door of claim 52, wherein said first sealant assembly has a heat transfer rate substantially equal to or less than 1.73 Btu/hr-ft-F.

54. (Previously Presented) The refrigeration door of claim 52, wherein said gas is selected from the group consisting of argon, krypton, and air.

55. (Original) The refrigeration door of claim 47, wherein said insulating glass unit has a U value substantially equal to or less than 0.16 BTU/hr-sq ft-F.

56. (Original) The refrigeration door of claim 47, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.04.

57. (Original) The refrigeration door of claim 47, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.01.

58. (Previously Presented) The refrigeration door of claim 47, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.0025.

59. (Original) The refrigeration door of claim 47, wherein the interior temperature of the refrigerating compartment is substantially equal to or less than minus twenty degrees Fahrenheit; the temperature of the exterior environment is substantially equal to or greater than seventy degrees Fahrenheit; and the humidity in the exterior environment is substantially equal to or greater than sixty percent; and wherein the outer surface of the door is substantially free of condensation.

60. (Original) The refrigeration door of claim 47, wherein the interior temperature of the refrigerating compartment is substantially equal to or less than minus forty degrees Fahrenheit; the temperature of the exterior environment is substantially equal to or greater than eighty degrees Fahrenheit; and the humidity in the exterior environment is substantially equal to or

greater than sixty percent; and wherein the outer surface of the door is substantially free of condensation.

61. (Currently Amended) A refrigeration door having an outside surface and adapted to be mounted on a refrigerating compartment, said door comprising:

a first sheet of glass;

a second sheet of glass;

a first sealant assembly disposed around the periphery of said first sheet of glass and said second sheet of glass for maintaining said first sheet and said second sheet in spaced-apart relationship from each other;

a first low emissivity coating adjacent a surface of said first sheet or said second sheet of glass;

said first sheet and second sheets of glass, said first sealant assembly, and said first low emissivity coating forming an insulating glass unit having an emissivity substantially equal to or less than 0.04 substantially preventing the formation of condensation on the outside surface of the refrigeration door without the application of electricity for heating said outer surface; and

a frame secured around the periphery of said insulating glass unit; wherein the first sealant assembly is a non-metal sealant assembly.

62. (Previously Presented) The refrigeration door of claim 61, further comprising:

a third sheet of glass;

a second sealant assembly disposed around the periphery of said second sheet of glass and said third sheet of glass for maintaining said second sheet and said third sheet in spaced-apart relationship from each other; and

wherein said insulating glass unit further includes said third sheet of glass and said second sealant assembly.

63. (Original) The refrigeration door of claim 62, further including a second low emissivity coating adjacent a surface of said first sheet, said second sheet, or said third sheet of glass.

64. (Original) The refrigeration door of claim 61, further comprising:

a first chamber defined by said first sheet of glass, said second sheet of glass, and said first sealant assembly; and

a gas disposed in said first chamber.

65. (Original) The refrigeration door of claim 64, wherein said first sealant assembly has a heat transfer rate substantially equal to or less than 1.73 Btu/hr-ft-F.

66. (Original) The refrigeration door of claim 65, wherein said gas is selected from the group consisting of argon, krypton, and air.

67. (Original) The refrigeration door of claim 61, wherein said insulating glass unit has a U value substantially equal to or less than 0.16 BTU/hr-sq ft-F.

68. (Original) The refrigeration door of claim 61, wherein said insulating glass unit has a U value substantially equal to or less than 0.20 BTU/hr-sq ft-F.

69. (Original) The refrigeration door of claim 61, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.01.

70. (Original) The refrigeration door of claim 61, wherein insulating glass unit has an emissivity substantially equal to or less than 0.0025.

71. (Currently Amended) A method of manufacturing a refrigeration door component having an outer surface, said method comprising the steps of:

providing a first sheet of glass

providing a second sheet of glass;

providing a first low emissivity coating adjacent a surface of said first sheet of glass or said second sheet of glass;

disposing a first sealant assembly around the periphery of said first sheet of glass and said second sheet of glass to maintain said first sheet and said second sheet in spaced-apart relationship from each other; and

said first sheet of glass, said second sheet of glass, and said first sealant assembly forming an insulating glass unit having a U value substantially equal to or less than 0.2 BTU/hr-sq ft-F substantially preventing the formation of condensation on the outer surface of the refrigeration door component without the application of electricity for heating the door component; wherein the first sealant assembly is a non-metal sealant assembly.

72. (Original) The method of claim 71, wherein said first sheet of glass, said second sheet of glass, and said first sealant assembly define a first chamber; and further comprising the step of disposing a gas in said first chamber.

73. (Original) The method of claim 71, further comprising the steps of:

providing a third sheet of glass;

disposing a second sealant assembly disposed around the periphery of said second sheet of glass and said third of glass for maintaining said second sheet and said third sheet in spaced-apart relationship from each other; and

wherein said insulating glass unit further includes said third sheet of glass and said second sealant assembly.

74. (Original) The method of claim 73, wherein said third sheet of glass includes a low emissivity coating adjacent a surface of said third sheet of glass.

75. Canceled.

76. (Original) The method of claim 71, wherein said first sealant assembly has a heat transfer rate substantially equal to or less than 1.73 Btu/hr-ft-F.

77. (Original) The method of claim 76, wherein:

said first and said second sheets of glass having a thickness substantially equal to one eighth of an inch; and

said first and said second sheets of glass being spaced apart a distance substantially equal to one half inch.

78. (Original) The method of claim 71, further including the step of disposing said insulating glass unit in a door frame.

79. (Original) The method of claim 72, wherein said gas is selected from the group consisting of argon, krypton, and air.

80. (Original) The method of claim 71, wherein said insulating glass unit has a U value substantially equal to or less than 0.16 BTU/hr-sq ft-F.

81. (Original) The method of claim 71, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.04.

82. (Original) The method of claim 71, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.01.

83. (Original) The method of claim 71, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.0025.

84. (Original) The method of claim 71, wherein said low emissivity coating is selected from the group consisting of a titania based silver and fluorine doped tin oxide.

85. (Original) The method of claim 71, wherein said low emissivity coating is applied with a process selected from the group consisting of sputter coating, pyrolytic coating and spray coating.

86. Canceled.

87. (Previously Presented) The method of claim 73, wherein said first and second sealant assemblies have a heat transfer rate substantially equal to or less than 1.73 Btu/hr-ft-F.

88. (Previously Presented) The method of claim 71, wherein said first sealant assembly has a heat transfer rate substantially equal to or less than 1.51 Btu/hr-ft-F.

89. (Previously Presented) The method of claim 71, wherein said first sealant assembly has a heat transfer rate substantially equal to or less than 0.84 Btu/hr-ft-F.

90. (Currently Amended) A method of manufacturing a refrigeration door component having an outer surface, said method comprising the steps of:

providing a first sheet of glass;

providing a second sheet of glass;

providing a first low emissivity coating adjacent a surface of said first sheet of glass or said second sheet of glass;

disposing a first sealant assembly around the periphery of said first sheet of glass and said second sheet of glass to maintain said first sheet and said second sheet in spaced-apart relationship from each other; and

said first sheet of glass, said second sheet of glass, and said first sealant assembly forming an insulating glass unit having an emissivity substantially equal to or less than 0.04 substantially preventing the formation of condensation on the outer surface of the refrigeration door component without the application of electricity for heating the door component; wherein the first sealant assembly is a non-metal sealant assembly.

91. (Original) The method of claim 90, wherein said first sheet of glass, said second sheet of glass, and said first sealant assembly define a first chamber; and further comprising the step of disposing a gas in said first chamber.

92. (Original) The method of claim 90, further comprising the steps of:

providing a third sheet of glass;

disposing a second sealant assembly disposed around the periphery of said second sheet of glass and said third of glass for maintaining said second sheet and said third sheet in spaced-apart relationship from each other; and

wherein said insulating glass unit further includes said third sheet of glass and said second sealant assembly.

93. (Original) The method of claim 92, wherein said third sheet of glass includes a low emissivity coating adjacent a surface of said third sheet of glass.

94. (Original) The method of claim 90, wherein said first sealant assembly has a heat transfer rate substantially equal to or less than 1.73 Btu/hr-ft-F.

95. (Original) The method of claim 90, further including the step of disposing said insulating glass unit in a door frame.

96. (Original) The method of claim 91, further including the step of disposing said insulating glass unit in a door frame.

97. (Original) The method of claim 96, wherein said gas is selected from the group consisting of argon, krypton, and air.

98. (Original) The method of claim 90, wherein said insulating glass unit has a U value substantially equal to or less than 0.2 BTU/hr-sq ft-F.

99. (Original) The method of claim 90, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.01.

100. (Original) The method of claim 90, wherein said insulating glass unit has an emissivity substantially equal to or less than 0.0025.

101. (Previously Presented) The method of claim 92, wherein said first and second sealant assemblies have a heat transfer rate substantially equal to or less than 1.73 Btu/hr-ft-F.

102. (Previously Presented) The method of claim 90, wherein said first sealant assembly has a heat transfer rate substantially equal to or less than 1.51 Btu/hr-ft-F.

103. (Previously Presented) The method of claim 90, wherein said first sealant assembly has a heat transfer rate substantially equal to or less than 0.84 Btu/hr-ft-F.

104. (Currently Amended) A substantially transparent insulating glass unit door having an outer surface and being for use with a refrigerating compartment residing in an exterior environment and having an interior refrigerating compartment; said insulating glass unit door comprising:

a first sheet of glass;

a second sheet of glass;

a first sealant assembly disposed around the periphery of said first sheet of glass and said second sheet of glass for maintaining said first sheet and said second sheet in spaced-apart relationship from each other;

a first low emissivity coating adjacent a surface of said first sheet or said second sheet of glass, and

said first sheet of glass, said second sheet of glass, and said first sealant assembly providing the insulating glass unit with a U value effective to substantially prevent the formation condensation on the outer surface without the application of a electricity to heat the outer surface of the insulating glass unit when the interior temperature of the refrigerating compartment is

substantially equal to or less than zero degrees Fahrenheit; the temperature of the exterior environment is substantially equal to or greater than seventy degrees Fahrenheit; and the humidity in the exterior environment is substantially equal to or greater than sixty percent; wherein the first sealant assembly is a non-metal sealant assembly.

105. (Original) The door of claim 104, further comprising:

a third sheet of glass; and

a second sealant assembly disposed around the periphery of said second sheet of glass and said third of glass for maintaining said first sheet and said second sheet in spaced-apart relationship from each other.

106. (Original) The door of claim 105, further including a second low emissivity coating adjacent a surface of said first sheet, said second sheet or said third sheet of glass.

107. (Original) The door of claim 106 wherein the insulating glass unit has a U value that substantially prevents the formation condensation on the outer surface when the interior temperature of the refrigerating compartment is substantially equal to or less than minus forty degrees Fahrenheit; the temperature of the exterior environment is at substantially equal to or greater than eighty degrees Fahrenheit; and the humidity in the exterior environment is substantially equal to or greater than sixty percent.

108. (Original) The door of claim 106, wherein said low emissivity coating is effective to cause the insulating glass unit to have a U value substantially equal to or less than 0.2 BTU/hr-sq ft-F.

109. (Previously Presented) The door of claim 105, wherein said first sealant assembly and said second sealant assembly each have a heat transfer rate substantially equal to or less than 1.73 Btu/hr-ft-F.

110. (Previously Presented) The door of claim 104, wherein the insulating glass unit has a U value substantially equal to or less than 0.16 BTU/hr-sq ft-F.

111. (Previously Presented) The door of claim 104, wherein said first sheet or second sheet has an emissivity substantially equal to or less than 0.05.

112. (Previously Presented) The door of claim 104, wherein the insulating glass unit has an emissivity substantially equal to or less than 0.04.

113. (Previously Presented) The door of claim 104, wherein the insulating glass unit has an emissivity substantially equal to or less than 0.01.

114. (Previously Presented) The door of claim 104, wherein the interior temperature of the refrigerating compartment is substantially equal to or less than minus twenty degrees Fahrenheit; the temperature of the exterior environment is substantially equal to or greater than seventy degrees Fahrenheit; and the humidity in the exterior environment is substantially equal to or greater than sixty percent.

115. (Previously Presented) The door of claim 104, wherein the interior temperature of the refrigerating compartment is substantially equal to or less than minus forty degrees Fahrenheit; the temperature of the exterior environment is substantially equal to or greater than eighty degrees Fahrenheit; and the humidity in the exterior environment is substantially equal to or greater than sixty percent.

116. (Previously Presented) The door of claim 105, wherein said first sealant assembly and said second sealant assembly each have a heat transfer rate substantially equal to or less than 1.73 Btu/hr-ft-F.

117. (Currently Amended) A refrigeration unit including an insulated enclosure defining a compartment, a cooling system, and a door adapted to be mounted on an opening of said compartment, said door having an outer surface and comprising:

a first sheet of glass;

a second sheet of glass;

a first sealant assembly disposed around the periphery of said first sheet of glass and said second sheet of glass for maintaining said first sheet and said second sheet in spaced-apart relationship from each other;

a first low emissivity coating adjacent the a surface of said first or said second sheet of glass;

said first sheet, second sheet, first sealant assembly, and said first low emissivity coating forming an insulating glass unit having a U value substantially equal to or less than 0.2. BTU/hr-

sq ft-F substantially preventing the formation of condensation on the outer surface of the door without the application of electricity for heating said first surface; and

a frame secured around the periphery of said insulating glass unit; wherein the first sealant assembly is a non-metal sealant assembly.

118. (Previously Presented) The refrigeration unit of claim 117, further comprising:

a third sheet of glass; and

a second sealant assembly disposed around the periphery of said second sheet of glass and said third of glass for maintaining said second sheet and said third sheet in spaced-apart relationship from each other.

119. (Previously Presented) The refrigeration unit of claim 117, further comprising:

a first chamber defined by said first sheet of glass, said second sheet of glass, and said first sealant assembly;

a second chamber defined by said middle sheet of glass, said outer sheet of glass, and said second sealant assembly; and

a gas disposed in each of said first and second chambers.

120. (Previously Presented) The refrigeration unit of claim 118, wherein said first sealant assembly and said second sealant assembly each have a heat transfer rate substantially equal to or less than 1.73 Btu/hr-ft-F.

121. (Previously Presented) The refrigeration unit of claim 117, wherein the refrigeration door has an emissivity substantially equal to or less than 0.04.

122. (Previously Presented) The refrigeration unit of claim 117, wherein the refrigeration door has an emissivity substantially equal to or less than 0.01.

123. (Previously Presented) The refrigeration unit of claim 117, wherein said first sealant assembly has a heat transfer rate substantially equal to or less than 1.73 Btu/hr-ft-F.

124. (New) The refrigeration door of claim 1, wherein at least one of said first or second sealant assembly is a composite extrusion comprising a combination of polyisobutylene sealant, hot melt butyl sealant, desiccant matrix, rubber shim, and a vapor barrier.

125. (New) The refrigeration door of claim 1, wherein at least one of said first or second sealant assembly is an all-foam assembly.

126. (New) The refrigeration door of claim 1, wherein at least one of said first or second sealant assembly is a warm edge seal.

127. (New) The refrigeration door of claim 26, wherein at least one of said first or second sealant assembly is a composite extrusion comprising a combination of polyisobutylene sealant, hot melt butyl sealant, desiccant matrix, rubber shim, and a vapor barrier.

128. (New) The refrigeration door of claim 26, wherein at least one of said first or second sealant assembly is an all-foam assembly.

129. (New) The refrigeration door of claim 26, wherein at least one of said first or second sealant assembly is a warm edge seal.

130. (New) The refrigeration door of claim 47, wherein said first sealant assembly is a composite extrusion comprising a combination of polyisobutylene sealant, hot melt butyl sealant, desiccant matrix, rubber shim, and a vapor barrier.

131. (New) The refrigeration door of claim 47, wherein said first sealant assembly is an all-foam assembly.

132. (New) The refrigeration door of claim 47, wherein said first sealant assembly is a warm edge seal.

133. (New) The refrigeration door of claim 61, wherein said first sealant assembly is a composite extrusion comprising a combination of polyisobutylene sealant, hot melt butyl sealant, desiccant matrix, rubber shim, and a vapor barrier.

134. (New) The refrigeration door of claim 61, wherein said first sealant assembly is an all-foam assembly.

135. (New) The refrigeration door of claim 61, wherein said first sealant assembly is a warm edge seal.

136. (New) The method of claim 71, wherein said first sealant assembly is a composite extrusion comprising a combination of polyisobutylene sealant, hot melt butyl sealant, desiccant matrix, rubber shim, and a vapor barrier.

137. (New) The method of claim 71, wherein said first sealant assembly is an all-foam assembly.

138. (New) The method of claim 71, wherein said first sealant assembly is a warm edge seal.

139. (New) The method of claim 90, wherein said first sealant assembly is a composite extrusion comprising a combination of polyisobutylene sealant, hot melt butyl sealant, desiccant matrix, rubber shim, and a vapor barrier.

140. (New) The method of claim 90, wherein said first sealant assembly is an all-foam assembly.

141. (New) The method of claim 90, wherein said first sealant assembly is a warm edge seal.

142. (New) The insulating glass door of claim 104, wherein said first sealant assembly is a composite extrusion comprising a combination of polyisobutylene sealant, hot melt butyl sealant, desiccant matrix, rubber shim, and a vapor barrier.

143. (New) The insulating glass door of claim 104, wherein said first sealant assembly is an all-foam assembly.

144. (New) The insulating glass door of claim 104, wherein said first sealant assembly is a warm edge seal.

145. (New) The refrigeration unit of claim 117, wherein said first sealant assembly is a composite extrusion comprising a combination of polyisobutylene sealant, hot melt butyl sealant, desiccant matrix, rubber shim, and a vapor barrier.

146. (New) The refrigeration unit of claim 117, wherein said first sealant assembly is an all-foam assembly.

147. (New) The refrigeration unit of claim 117, wherein said first sealant assembly is a warm edge seal.